

# Work Order ID 84178

**\*84178\***

Page 1

May 7, 2012 10:30:29 AM

Item ID: D4277-11

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Stop

**\*NS2\***

Item Name: Rib

Start Date: 5/07/12

Start Qty: 6.00

**\*6\***

Cust Item ID:

Required Date: 5/11/12

Req'd Qty: 6.00

**\*6\***

Customer:

Reference:

Approvals:

Process Plan: CL

Date: 12/05/07 Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D4277

D

100

0.00

**\*100\***

Large Fab

Memo

0.00

Large Fab

- 1- Cut tube at 26.00" with the 45 degree angle
- 2- Remove marking
- 3- On manual bender, bend as per dwg
- 4- Cut to size, 63 degree as per dwg
- 5- Deburr

6 SAD 12-05-07

110

QC6- Inspect dimensions to drawing

0.00

**\*110\***

QC

Memo

0.00

Quality Control

6 12-05-08

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

NOTE: Date & initial all entries

May 7, 2012 10:30:29 AM

**\*84178\***

Page 2

Item ID: D4277-11

**Accept**

**\*N900040100\***

Setup Start \*NS1\*

Revision ID:

**Item Name:** Rib

Stop \*NS2\*

**Start Date:** 5/07/12      **Start Qty:** 6.00

\*6\*

**Cust Item ID:**

**Required Date:** 5/11/12      **Req'd Qty:** 6.00

\*6\*

**Customer:**

**Reference:**

Approvals:      Process Plan: \_\_\_\_\_      Date: \_\_\_\_\_      Tooling: \_\_\_\_\_      Date: \_\_\_\_\_

Run Start \*NR1\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop \*NR2\*

Sequence ID/  
Work Center ID

### Operation Description

## Set Up/ Run Hours

| Tool ID | Tool # | Plan Code |
|---------|--------|-----------|
|---------|--------|-----------|

Accept  
City

Reject  
Qty

| Reject | Number |
|--------|--------|
| 1      | 1      |
| 2      | 2      |
| 3      | 3      |
| 4      | 4      |
| 5      | 5      |
| 6      | 6      |
| 7      | 7      |
| 8      | 8      |
| 9      | 9      |
| 10     | 10     |
| 11     | 11     |
| 12     | 12     |
| 13     | 13     |
| 14     | 14     |
| 15     | 15     |
| 16     | 16     |
| 17     | 17     |
| 18     | 18     |
| 19     | 19     |
| 20     | 20     |
| 21     | 21     |
| 22     | 22     |
| 23     | 23     |
| 24     | 24     |
| 25     | 25     |
| 26     | 26     |
| 27     | 27     |
| 28     | 28     |
| 29     | 29     |
| 30     | 30     |
| 31     | 31     |
| 32     | 32     |
| 33     | 33     |
| 34     | 34     |
| 35     | 35     |
| 36     | 36     |
| 37     | 37     |
| 38     | 38     |
| 39     | 39     |
| 40     | 40     |
| 41     | 41     |
| 42     | 42     |
| 43     | 43     |
| 44     | 44     |
| 45     | 45     |
| 46     | 46     |
| 47     | 47     |
| 48     | 48     |
| 49     | 49     |
| 50     | 50     |
| 51     | 51     |
| 52     | 52     |
| 53     | 53     |
| 54     | 54     |
| 55     | 55     |
| 56     | 56     |
| 57     | 57     |
| 58     | 58     |
| 59     | 59     |
| 60     | 60     |
| 61     | 61     |
| 62     | 62     |
| 63     | 63     |
| 64     | 64     |
| 65     | 65     |
| 66     | 66     |
| 67     | 67     |
| 68     | 68     |
| 69     | 69     |
| 70     | 70     |
| 71     | 71     |
| 72     | 72     |
| 73     | 73     |
| 74     | 74     |
| 75     | 75     |
| 76     | 76     |
| 77     | 77     |
| 78     | 78     |
| 79     | 79     |
| 80     | 80     |
| 81     | 81     |
| 82     | 82     |
| 83     | 83     |
| 84     | 84     |
| 85     | 85     |
| 86     | 86     |
| 87     | 87     |
| 88     | 88     |
| 89     | 89     |
| 90     | 90     |
| 91     | 91     |
| 92     | 92     |
| 93     | 93     |
| 94     | 94     |
| 95     | 95     |
| 96     | 96     |
| 97     | 97     |
| 98     | 98     |
| 99     | 99     |
| 100    | 100    |

**Insp.  
Stamp**

-120

Identify as per dwg & Stock Location: WA

0.00

**\*120\***

Packaging :

## Memo

0.00

## Packaging

\*\*\*STOCK IN BASKET CELL\*\*\*

130

QC21- Final Inspection - Work Order Release

0.00

**\*130\***

QC

## Memo

0.00

## Quality Control

12/5/94

12-05-08

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Picklist Print

May 7, 2012 10:30:29 AM

Page 1

Work Order ID: 84178

Parent Item: D4277-11

Parent Item Name: Rib

Start Date: 5/07/12

Required Date: 5/11/12

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP Rev:A 10.11.12 new issue DD verf:EC  
DWG REV.C DD verf:EC

IPP Rev:B 11.01.20 AS PER

| Component Item ID/<br>Item Name   | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|-----------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| M304TS0.500W.049<br>Square Tubing |                        | Purchased     | No          |                     |                  | 100             | f                  | 713.3098       | 2.1666      | 13.683789    |               |                |        |

Location

Loc Qty

Loc Code

MAT034

713.3098093

118460

0.00001534

121328

167.492194

121565

545.8176

13.6838

SAD 12-05-07

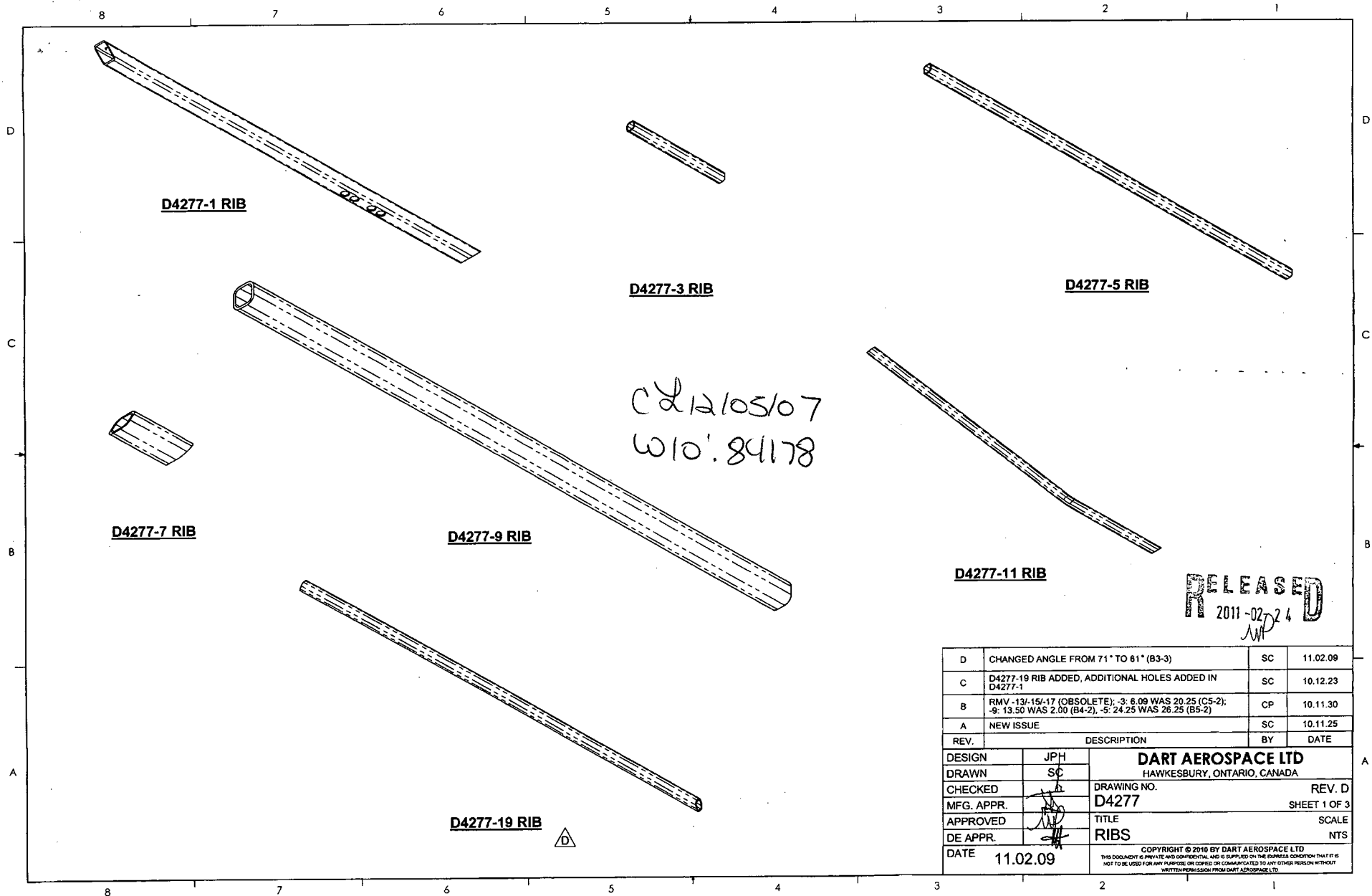
| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
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|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries



| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

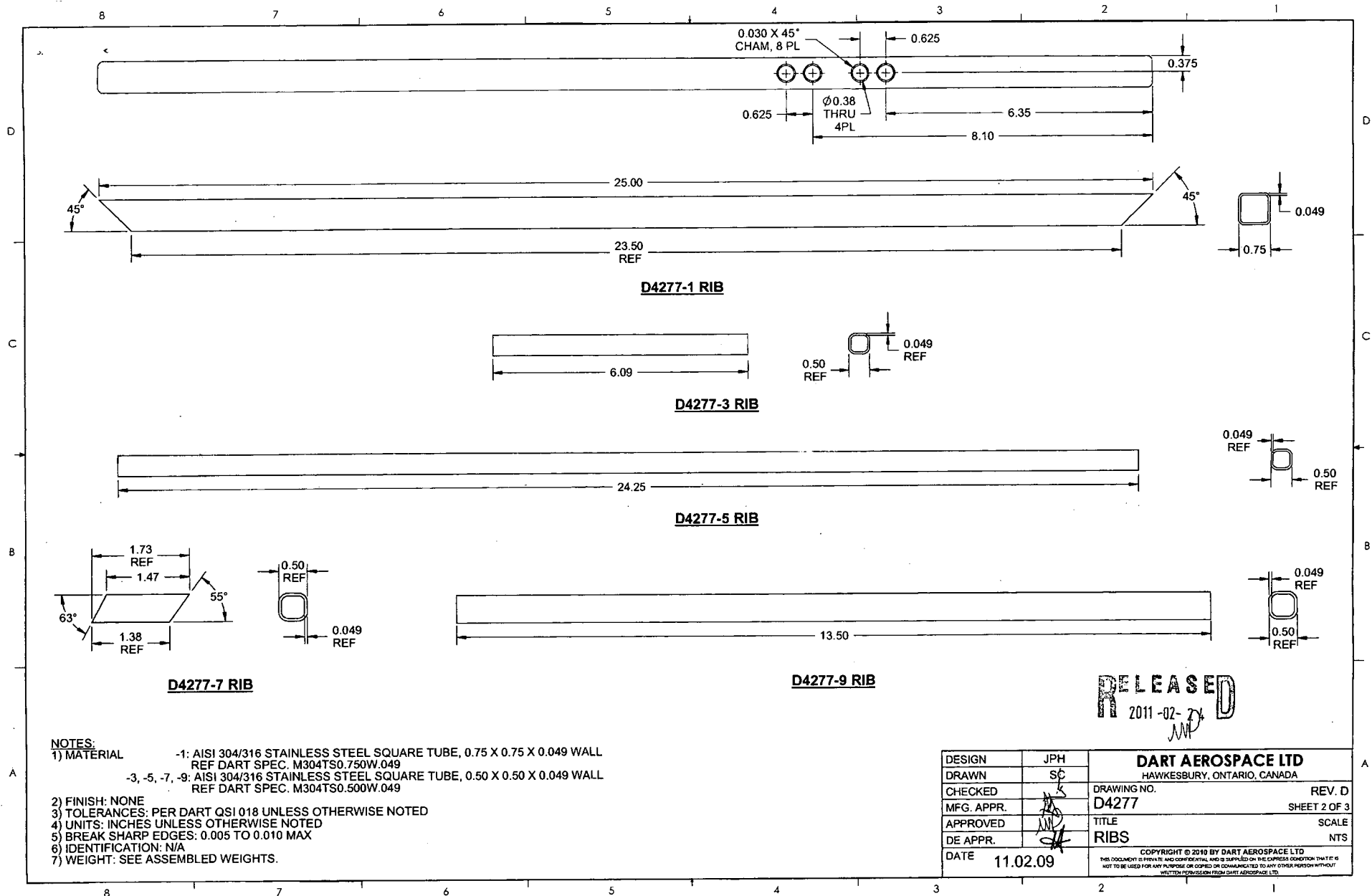
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
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|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries





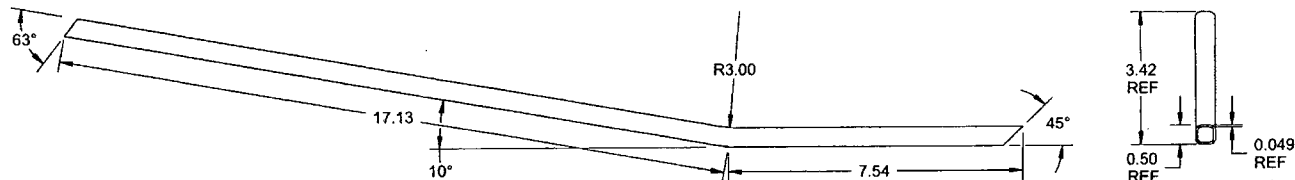
| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
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|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

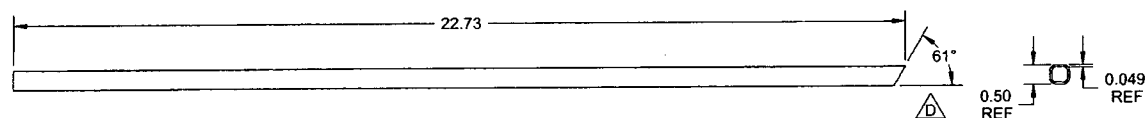
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries



**D4277-11 RIB**



**D4277-19 RIB**

**NOTES:**

- 1) MATERIAL -11, -19: AISI 304/316 STAINLESS STEEL SQUARE TUBE, 0.50 X 0.50 X 0.049 WALL  
REF DART SPEC. M304TS0.500W.049
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: SEE ASSEMBLED WEIGHTS.

**RELEASED**  
2011-02-24

|            |          |   |              |
|------------|----------|---|--------------|
| DESIGN     | JPH      | <b>DART AEROSPACE LTD</b>   |              |
| DRAWN      | SC       | HAWKESBURY, ONTARIO, CANADA   |              |
| CHECKED    | K        | DRAWING NO.   | REV. D       |
| MFG. APPR. |          | D4277   | SHEET 3 OF 3 |
| APPROVED   |          | TITLE   | SCALE        |
| DE APPR.   |          | RIBS  | NTS          |
| DATE       | 11.02.09 | COPYRIGHT © 2010 BY DART AEROSPACE LTD<br><small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> |              |

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries